larger than the actual parallax of the nebula.[2] The value obtained for proper motion is less than one second of arc per century.

Figured on the basis of a parallax of 0″.015 the distance of the ring nebula from the solar system would be 220 light years. The longer diameter of the ring or oval is about one minute of arc. The corresponding actual diameter would be two thousand times the diameter of the Earth's orbit or a little less than seventy times the diameter of the orbit of *Neptune*. Light traveling at the rate of 186,000 miles per second would require a period of twenty-three days to traverse the nebula from one extremity of the ring to the other.

These figures are based on a parallax of 0″.015, but if the parallax is actually smaller than this the distance of the nebula from the solar system and the dimensions of the nebula are greater still, in inverse proportion to the value of the parallax. Future observations may show this to be the case. It is almost certain however that the parallax is very small and consequently that the ring nebula is remote and very large as compared, say, with the solar system.

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EPHEMERIS OF JUPITER'S NINTH SATELLITE.

Greenwich Noon	SATELLITE − JUPITER *R. A.*	*Dec.*	*Magnitude*
1917 Nov. 9	− 6^m 41^s	− 40′.9	18.6
17	− 6 54	− 38.1	
25	− 7 3	− 34.9	18.5
Dec. 3	− 7 8	− 31.3	
11	− 7 9	− 27.2	18.5
19	− 7 5	− 22.8	
27	− 6 57	− 18.1	18.5
1918 Jan. 4	− 6 45	− 13.2	
12	− 6 28	− 8.1	18.6
20	− 6 8	− 3.1	
28	− 5 43	+ 1.8	18.7

A photograph of the satellite was made by Mr. Shapley with the 60-inch reflector on November 10th. The corrections to the ephemeris on that date were +0′.4 in R. A. and −0′.1 in Dec. The magnitudes given above are photographic and have been computed using 18.6 as the magnitude at mean opposition.

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[2] See, in this connection, van Maanen's note in the October number of these *Publications*.